

## Utah Weatherization - Cooling Equipment Policies

### **General Conditions for replacement, servicing & repairing existing operable central air conditioning systems & evaporative cooling equipment:**

- The use of LIHEAP Crisis funds for new equipment shall only be used if there is a medical necessity documented in the client file. Documentation must include: Dr.'s name, phone number, the specific necessity, and consequences to the elderly, disabled or pre-school aged children of not receiving the new cooling system.
- The use of any other funding source shall be as an energy saving measure showing an SIR of 1 or better using the NEAT/MHEA tool.
- Except for emergency or life-threatening cases, all work completed must be for new applicants only.
- System must have been operational sometime during the twelve-month period prior to the application approval date. If physical verification can not be made due to temperature consideration use of utility billing history is allowed. Either method should be documented in the Client File.
- Cost of repairs to central air conditioning systems should not exceed:
  - 40% of the cost of a new replacement system where the unit is 1-5 years old
  - 25% of the cost of a new replacement system where the unit is 6-10 years old
  - \$200 maximum repair threshold for units over 10 years old
 If repair costs exceed these thresholds, a replacement system should be considered.
- If installation of a new heating system will render the existing operational central air condition system inoperable replacement or necessary upgrades are permitted in accordance with these guidelines for equipment selection, sizing etc. This work is to be done as an incidental repair and funded accordingly.

### **General conditions for installing any new or replacement systems not operational sometime during the twelve-month period prior to the application approval date:**

- Must have a health & safety or medical justification and documentation of need. Documentation must include: Dr.'s name and phone number, the specific necessity, and consequences to the elderly, disabled or pre-school aged children of not receiving the new cooling system.
- Approval for equipment without a doctor's letter must be received in writing from DHCD.
- Regular WX replacements shall be based upon energy savings as allowed by the NEAT/MEHA with a SIR is 1.0 or greater.

Where life-threatening or other emergency cooling needs exist, local program coordinators can address the problems immediately outside of the priority list. They also have the option to move these clients up to the top of the list for all Weatherization services if it makes logistical sense to complete the project while the crew is already at the home. Temporary fans and portable evaporative coolers can also be provided in emergency situations until a permanent solution has been implemented.

### **Central air conditioning O&M's**

- Install set-back thermostats where appropriate.
- Replace filters & leave an extra set or provide a washable filter.
- Inspect equipment and ducts for mold, mildew, and other hazards and address accordingly.
- Check & clean indoor coil in delivery plenum and provide access panels if needed.
- Check for obstructions around and clean intake grill on outdoor compressor unit.
- Inspect and insulate tubing between outdoor and indoor components.
- Seal and insulate ducting as needed.

- Install/replace condensate pump as needed.
- Duct cleaning allowed only at registers and return grille.

### Conditions for replacing existing central air conditioning systems:

- Must be a current regular single-family owner occupied Weatherization client. It can be a HEAT Program crisis client, but only if there is a medical necessity documented in the client file. Documentation must include: Dr.'s name, phone number, the specific necessity, and consequences to the elderly, disabled or pre-school aged children of not receiving the new cooling system.
- System must have been operational sometime during the twelve-month period prior to the application approval date. If physical verification can not be made due to temperature consideration use of utility billing history is allowed. Either method should be documented in the Client File.
- Regular WX replacements shall be based upon energy savings are as allowed if by the NEAT/MEHA with a SIR is 1.0 or greater.
- Replacement units must be "Energy Star" rated or a minimum 13 SEER. Products and information can be found at: [http://www.energystar.gov/index.cfm?c=cac.pr\\_central\\_ac](http://www.energystar.gov/index.cfm?c=cac.pr_central_ac)
- Replacement units must be sized to the post Weatherization home characteristics using the "ASHRAE Manual J" mechanical equipment-sizing criteria with a copy in the client file. See Home Energy Magazine Online May/June 1995 at: <http://hem.dis.anl.gov/eehem/95/950509.html>
- Replacing central systems with one or more room air conditioners will be the recommended cost saving option where applicable, with an SIR of 1 or great using the NEAT/MHEA audit tool. If this option is exercised, the existing system will be disabled, refrigerant recaptured according to EPA regulations, and the coil in the delivery plenum will be removed to increase airflow. These units must be "Energy Star" rated. Products and information can be found at: [http://www.energystar.gov/index.cfm?c=roomac.pr\\_room\\_ac](http://www.energystar.gov/index.cfm?c=roomac.pr_room_ac)
- In new installations removable panels shall be installed to provide cleaning and maintenance access to the indoor coil in the delivery air plenum.
- Replacing central air conditioning systems with a whole house evaporative cooler may be an acceptable cost saving option, when the NEAT/MHEA audit tool shows an SIR of 1 or better. If this option is exercised, the existing system will be disabled, refrigerant recaptured according to EPA regulations, and the coil in the delivery plenum will be removed to increase airflow.
- When replacing existing central air conditioning units, refrigerant recovery must be done in accordance to EPA regulations.

### Conditions for servicing existing room air conditioners:

- No unit repairs are authorized except as detailed below:
  1. Existing unit must be operational
  2. Service is limited to lubrication, cleaning & straightening coils/fins, and cleaning/replacing filters
  3. Repairs are limited to maintaining a safe power connection, proper mounting, replacing knobs, tightening & straightening fans blades, and other low-cost/no-cost repairs and adjustments

### Conditions for replacing existing room air conditioners:

Must be a regular & approved Weatherization client. It can be a HEAT Program crisis client, but only if there is a medical necessity with sufficient documentation in the client file. Documentation must include: Dr.'s name and phone number, the specific necessity, and consequences to the elderly, disabled or pre-school aged children of not receiving the new cooling system.

- System must have been operational sometime during the twelve-month period prior to the application approval date.
- Replacements shall be based upon energy savings are as allowed if by the NEAT/MHEA with a SIR is 1.0 or greater. Room air conditioners may be tested with a digital power meter to measure electrical usage. Make sure digital power meter can handle the load of existing units.

- Replacement units must be “Energy Star” rated. Products and information can be found at: [http://www.energystar.gov/index.cfm?c=roomac.pr\\_room\\_ac](http://www.energystar.gov/index.cfm?c=roomac.pr_room_ac)
- When replacing existing room air conditioning units, the old unit must be removed from the job site and refrigerant recovery must be done in accordance to EPA regulations/

#### **Conditions for servicing & repairing existing evaporative cooling systems:**

- Indoor “cooler lids” or ‘insulation pillows” must be installed, when the season permit, not just provided, on all units. Crews should install the lid or pillow to ensure proper fit, educate the client on usage, then have the client store it during the cooling season.
- Roof mount units with duct(s) running through the attic are to be sealed with reinforcement tape & mastic and insulated on the outside of the duct with a minimum R-5. The preferred method would be the use of 2-Part foam. If this is not available or temperature conditions prohibit the use rigid foam is acceptable.
- Maintenance supplies up to \$50.00 in value, for items such as pads, pumps, floats, valves, tubing, etc. can be provided to clients for them to install. Do-It-Yourself installation instructions should also be given to clients for these items. These materials may be installed by Weatherization crews or contractors at discretion of the local agency.
- Client education materials & literature shall be provided on the proper maintenance of evaporative coolers and timelines for service

#### **Conditions for replacing existing evaporative cooling systems:**

- The use of LIHEAP Crisis funds for new equipment shall only be used if there is a medical necessity documented in the client file. Documentation must include: Dr.’s name, phone number, the specific necessity, and consequences to the elderly, disabled or pre-school aged children of not receiving the new cooling system.
- Replacement unit must have sufficient CFM flow for adequate cooling, but not oversized.
- Replacement must show an SIR of 1 or better using the NEAT/MEHA audit tool for all other funding sources.
- Replacement of an existing operational evaporative cooling system that will preserve weatherization measures installed is permitted as an incidental repair.

Example: Attic audits for air sealing and insulation. Older leaking evaporative cooler installed on roof that lets water in to the attic could be replaced with a window unit only and the old one removed and the roof repaired.